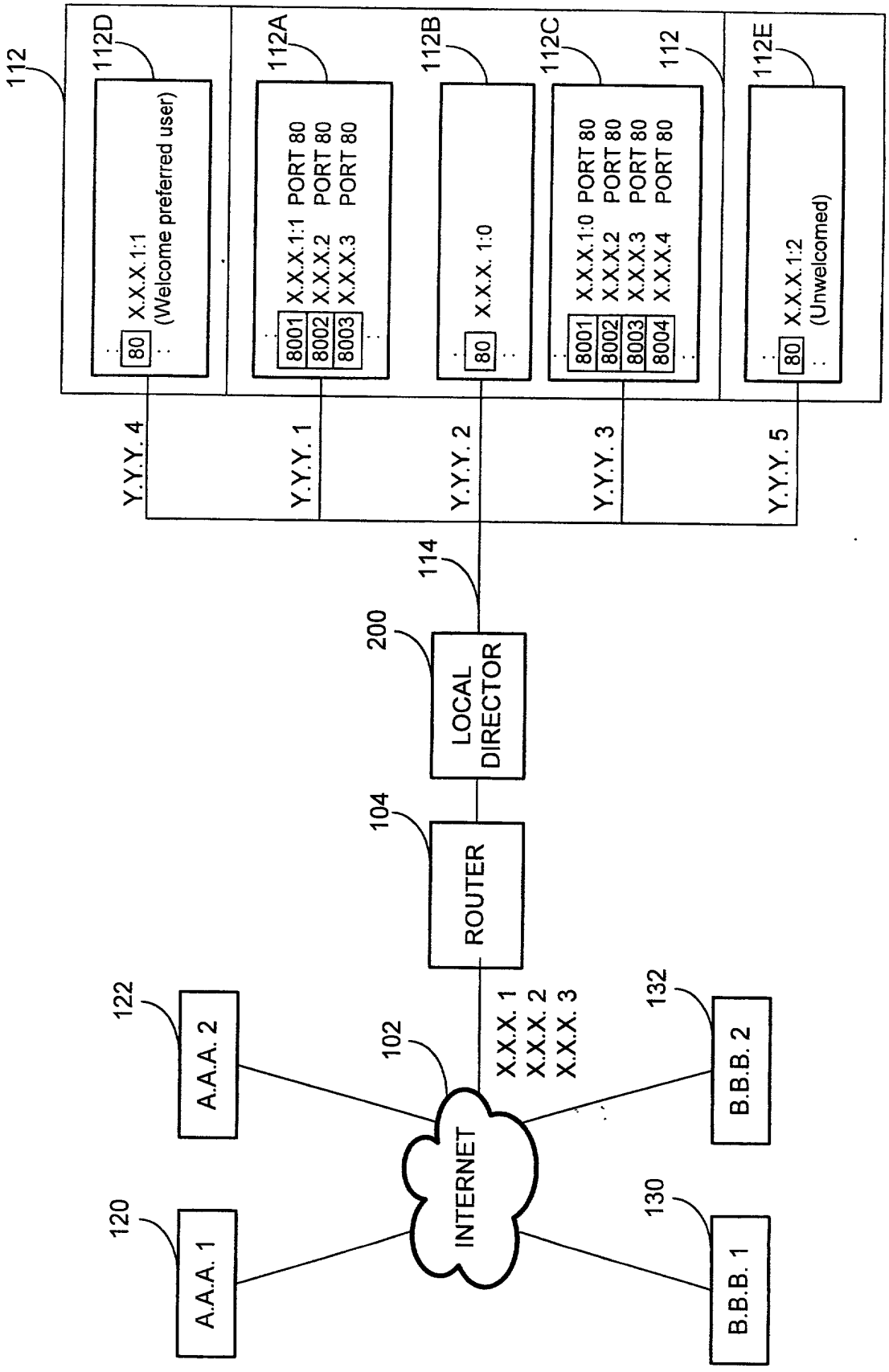
112
112D
X.X.X.1:1
(Welcome preferred user)
80
112A
X.X.X.1:1 PORT 80
X.X.X.2 PORT 80
X.X.X.3 PORT 80
8001
8002
8003
112B
X.X.X. 1:0
80
112C
X.X.X.1:0 PORT 80
X.X.X.2 PORT 80
X.X.X.3 PORT 80
X.X.X.4 PORT 80
8001
8002
8003
8004
112
112E
X.X.X.1:2
(Unwelcomed)
80
Y.Y.Y. 4
Y.Y.Y. 1
Y.Y.Y. 2
Y.Y.Y. 3
Y.Y.Y. 5
114
200
LOCAL DIRECTOR
104
ROUTER
X.X.X. 1
X.X.X. 2
X.X.X. 3
102
INTERNET
122
A.A.A. 2
120
A.A.A. 1
132
B.B.B. 2
130
B.B.B. 1

FIG. 1

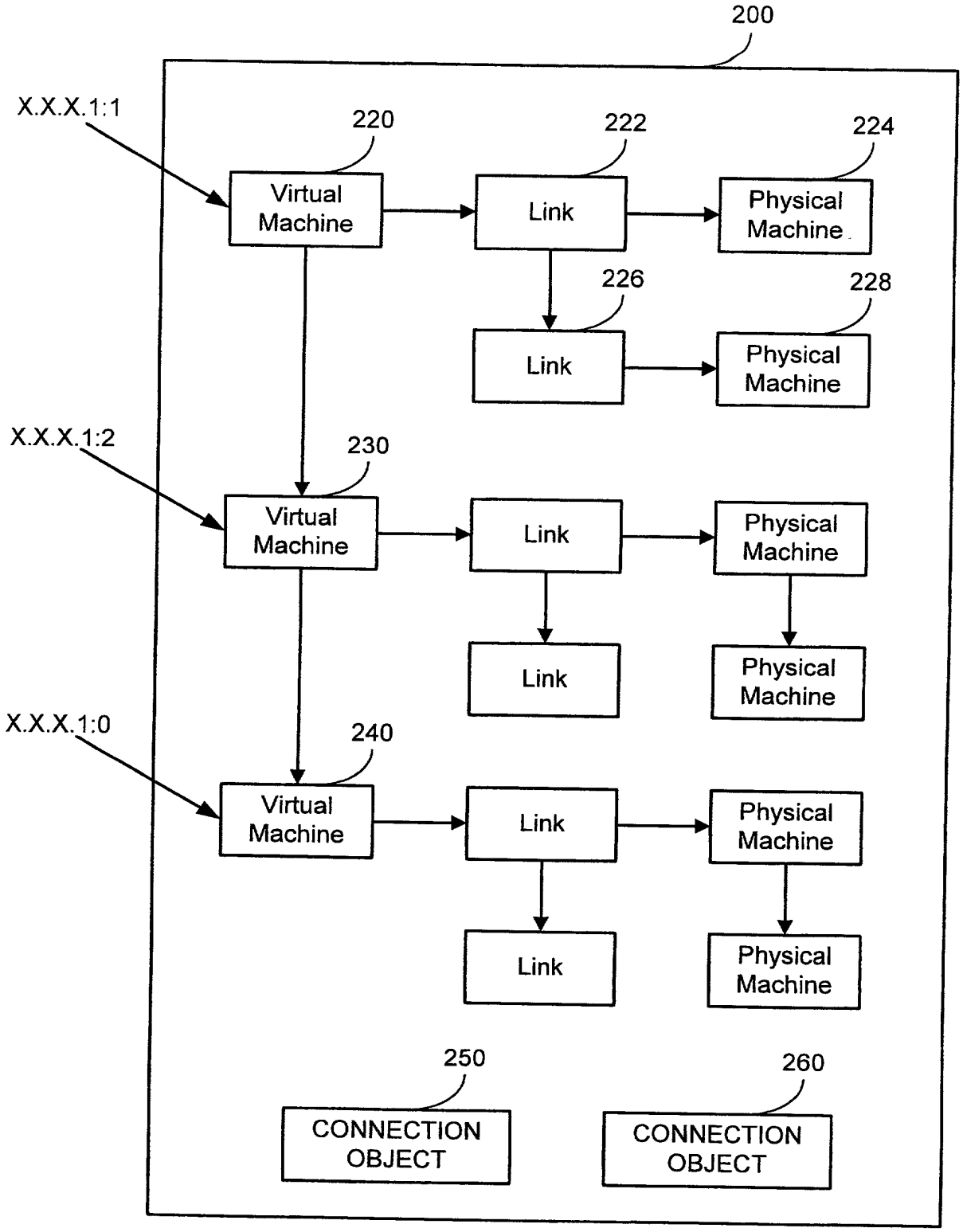
200
X.X.X.1:1
220
222
224
Virtual Machine
Link
Physical Machine
226
228
Link
Physical Machine
X.X.X.1:2
230
Virtual Machine
Link
Physical Machine
Link
Physical Machine
X.X.X.1:0
240
Virtual Machine
Link
Physical Machine
Link
Physical Machine
250
260
CONNECTION OBJECT
CONNECTION OBJECT

FIG. 2

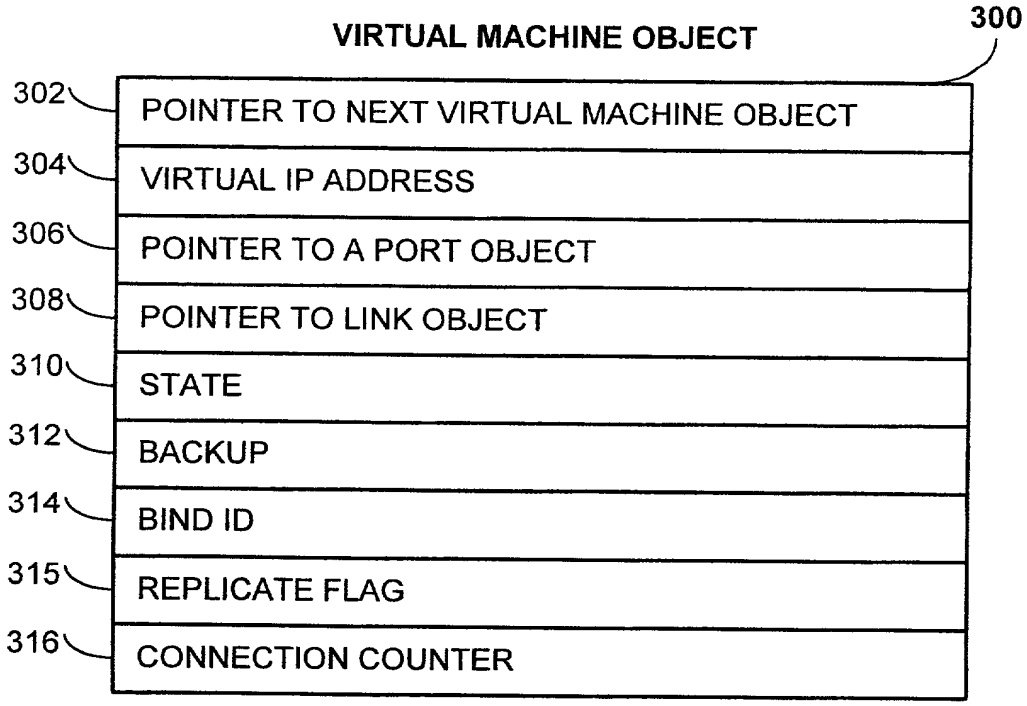

FIG. 3A

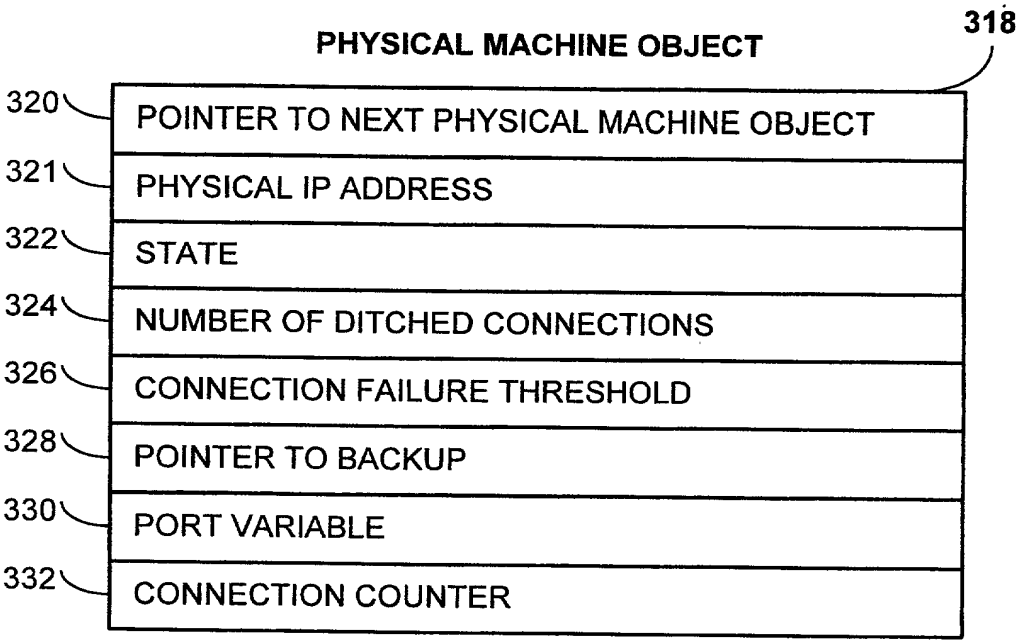

FIG. 3B

Docket No. 50277-1960

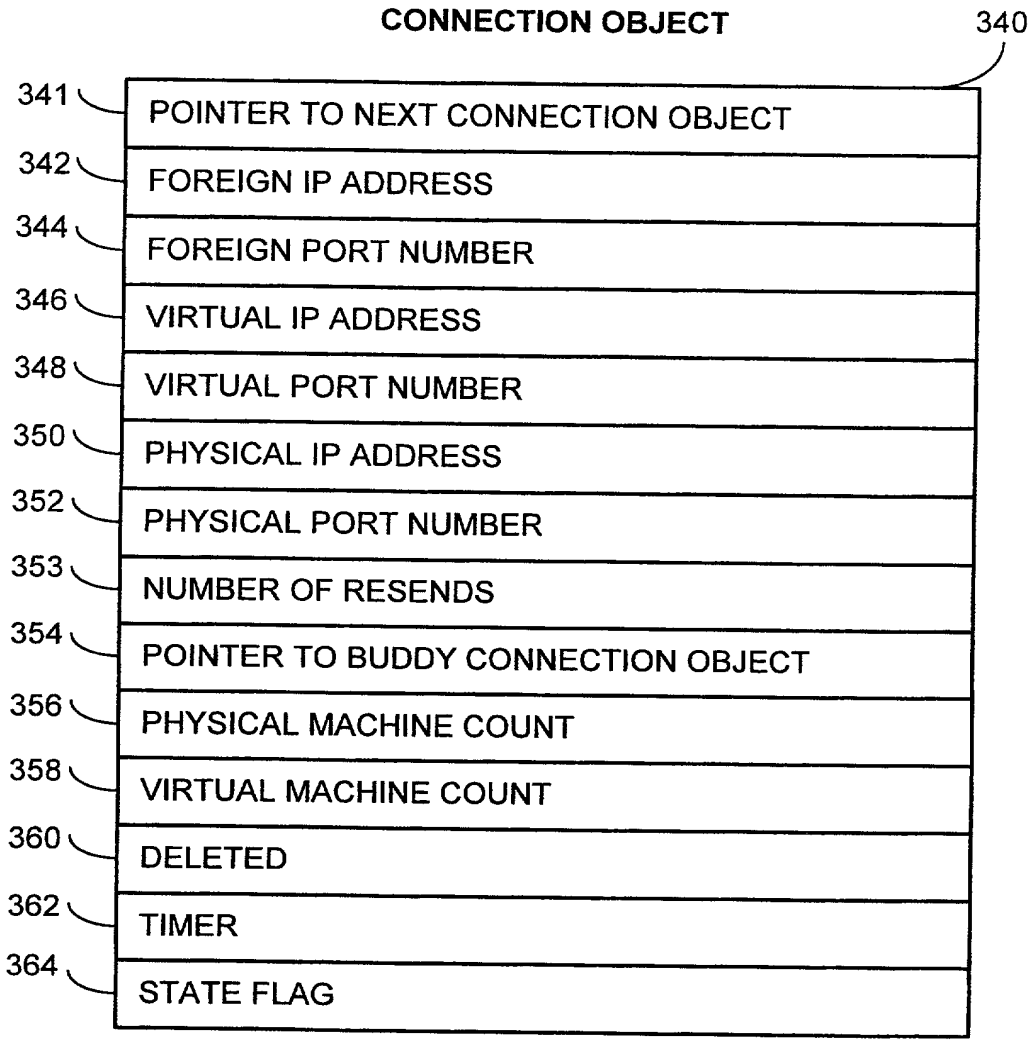

FIG. 3C

Petitioner's Exhibit 1006, p. 0096

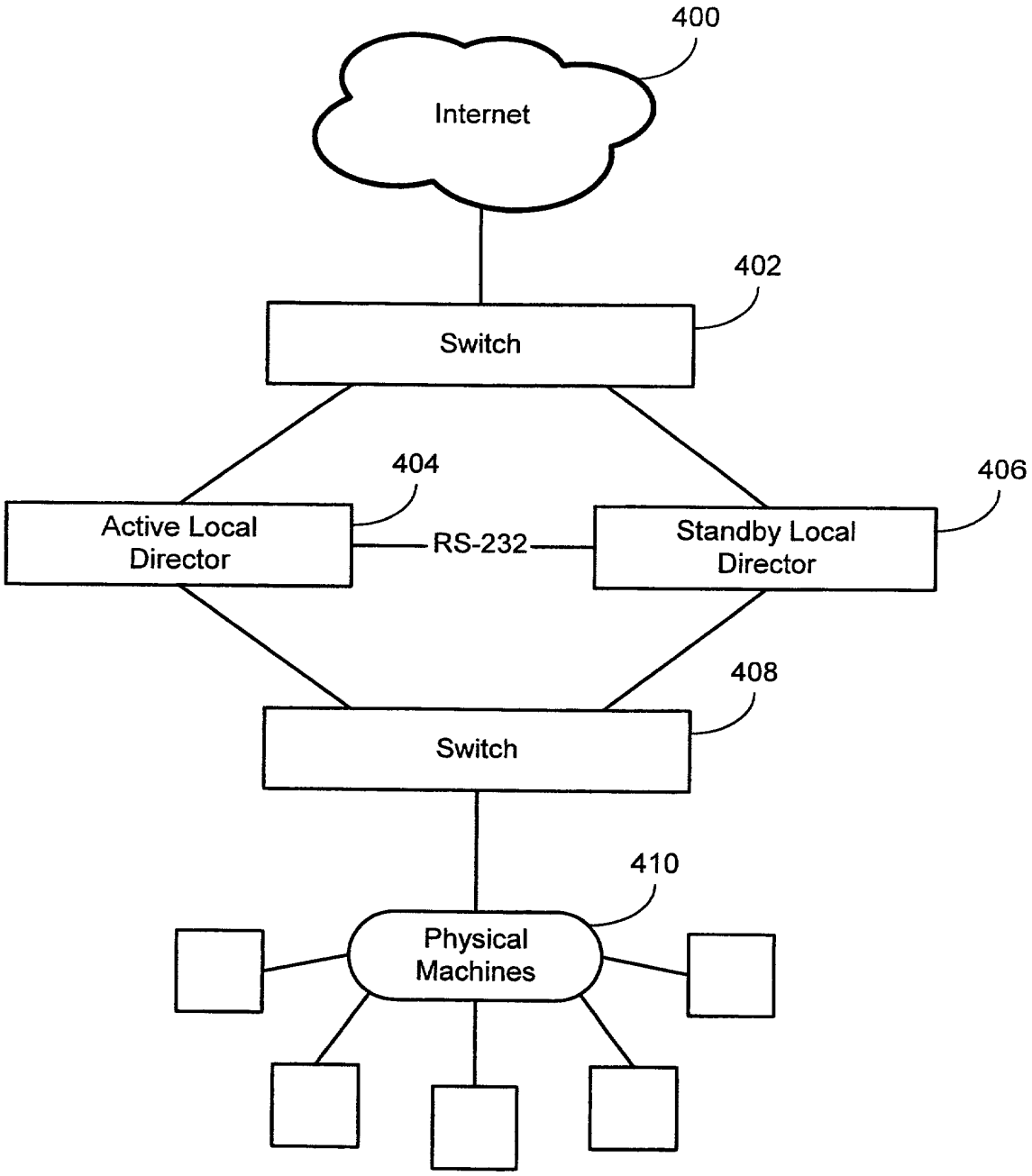

FIG. 4

Docket No. 50325-1696

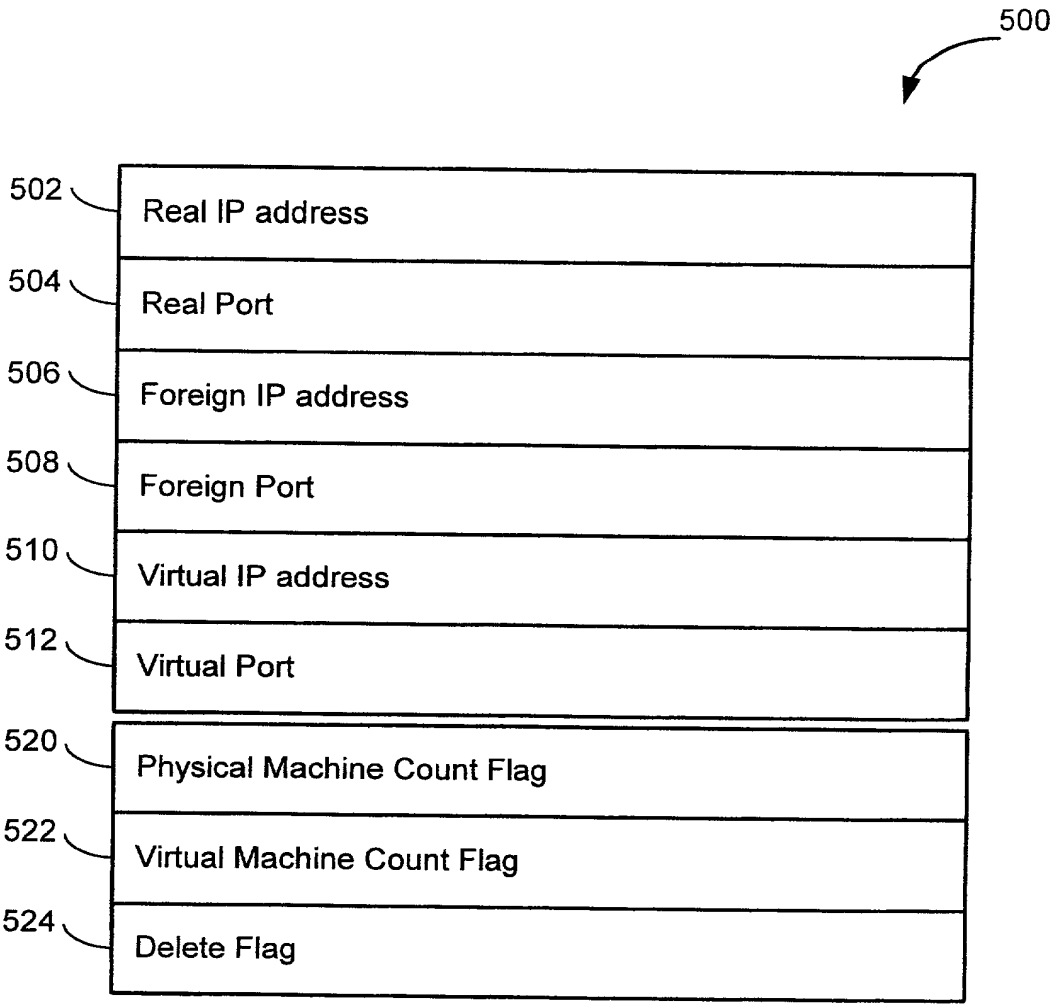
500
502
Real IP address
504
Real Port
506
Foreign IP address
508
Foreign Port
510
Virtual IP address
512
Virtual Port
520
Physical Machine Count Flag
522
Virtual Machine Count Flag
524
Delete Flag

FIG. 5

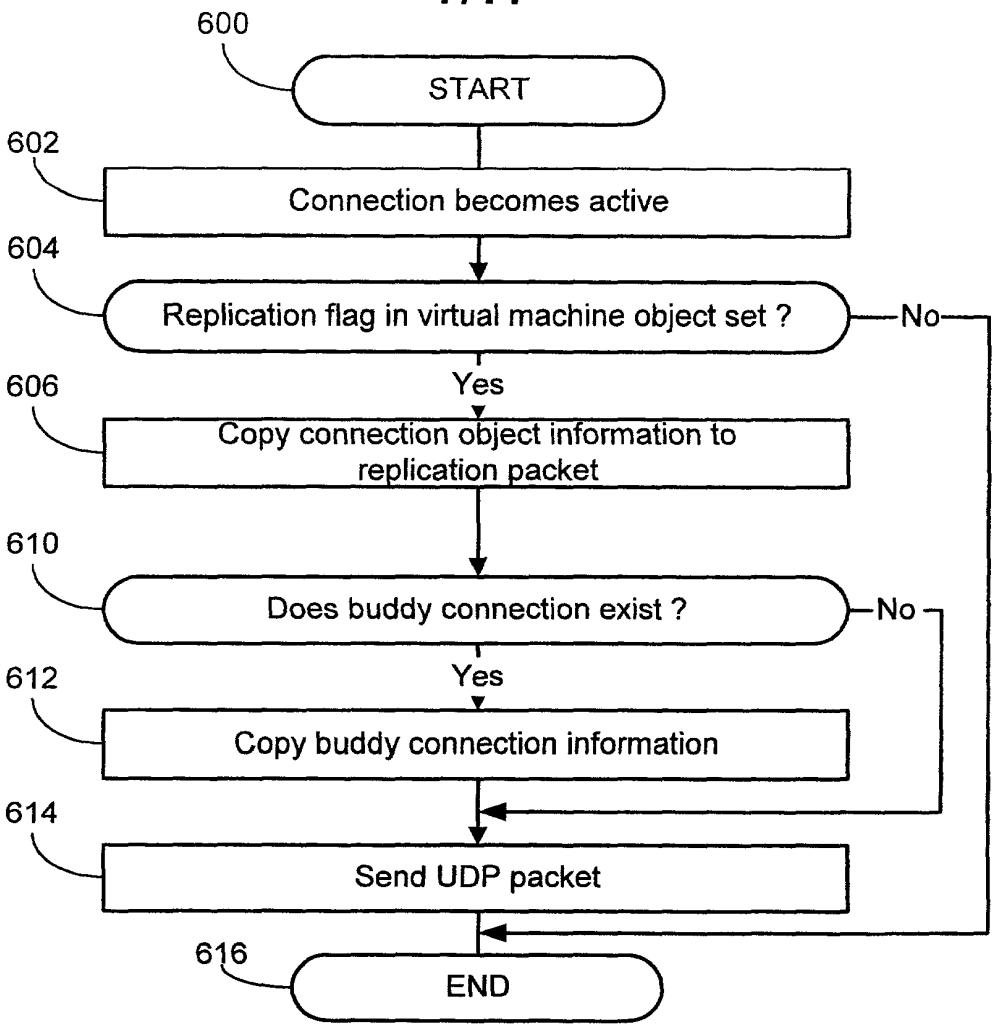

FIG. 6A

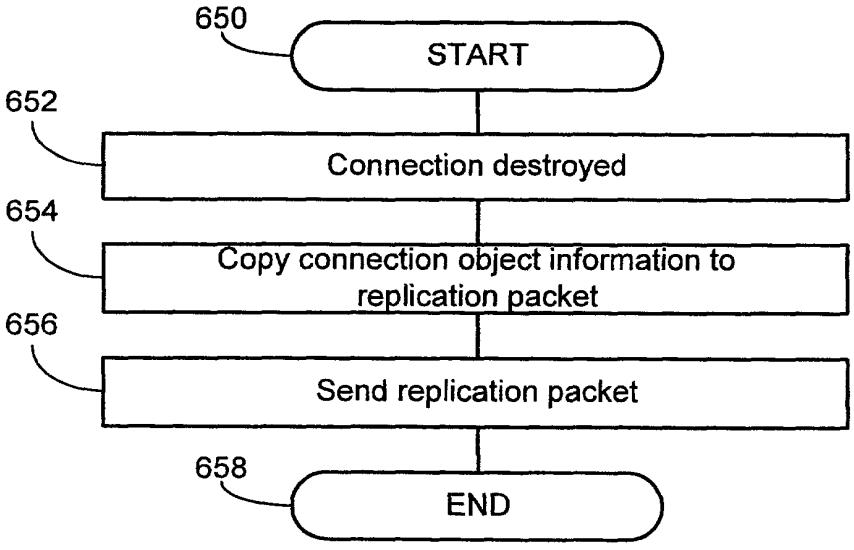

FIG. 6B

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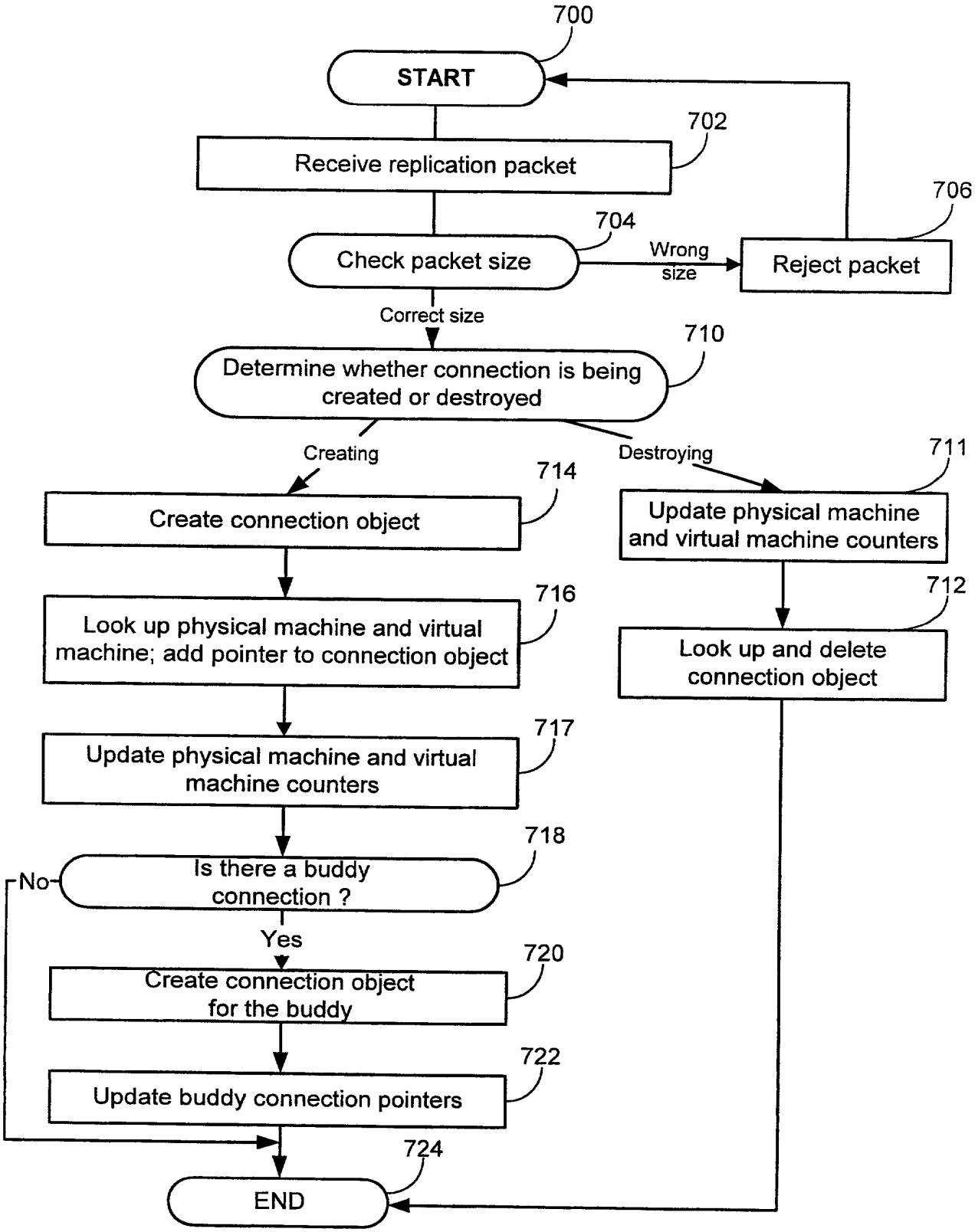
700
START
702
Receive replication packet
706
704
Check packet size
Wrong size
Reject packet
Correct size
710
Determine whether connection is being created or destroyed
Creating
Destroying
711
714
Create connection object
Update physical machine and virtual machine counters
716
712
Look up physical machine and virtual machine; add pointer to connection object
Look up and delete connection object
717
Update physical machine and virtual machine counters
718
No
Is there a buddy connection ?
Yes
720
Create connection object for the buddy
722
Update buddy connection pointers
724
END

FIG. 7

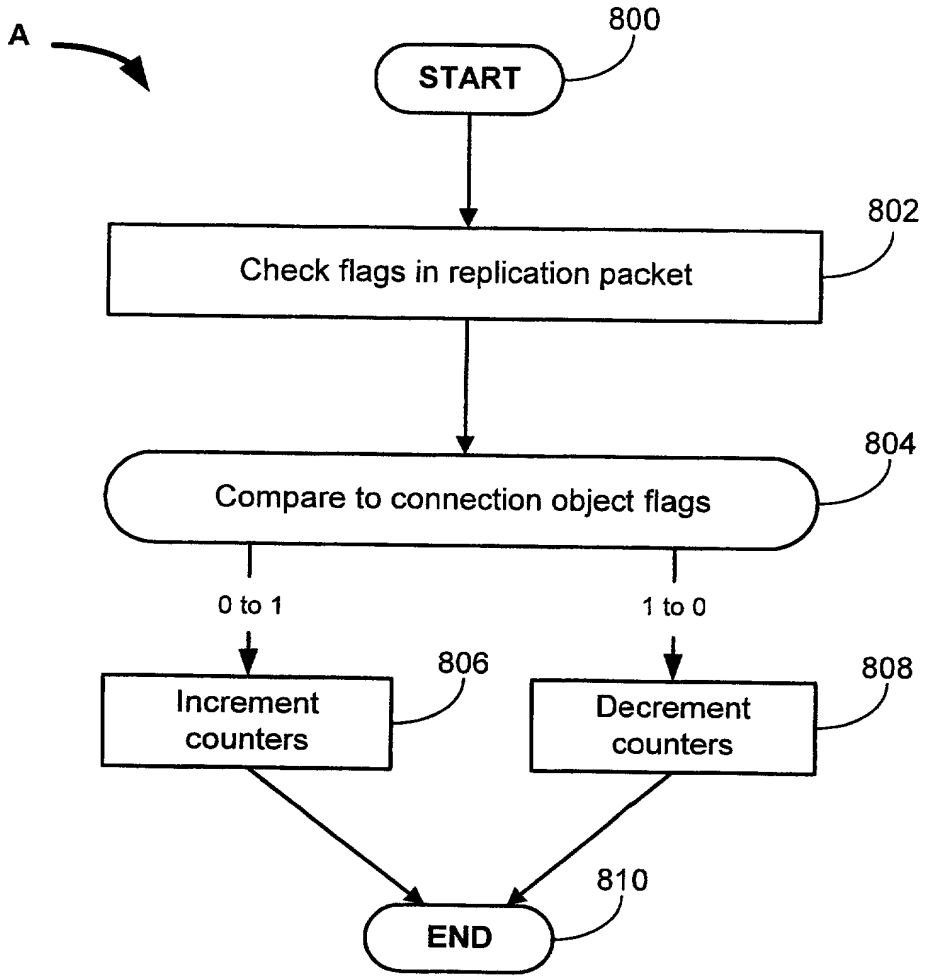
A
800
START
802
Check flags in replication packet
804
Compare to connection object flags
0 to 1
1 to 0
806
Increment counters
808
Decrement counters
810
END

FIG. 8

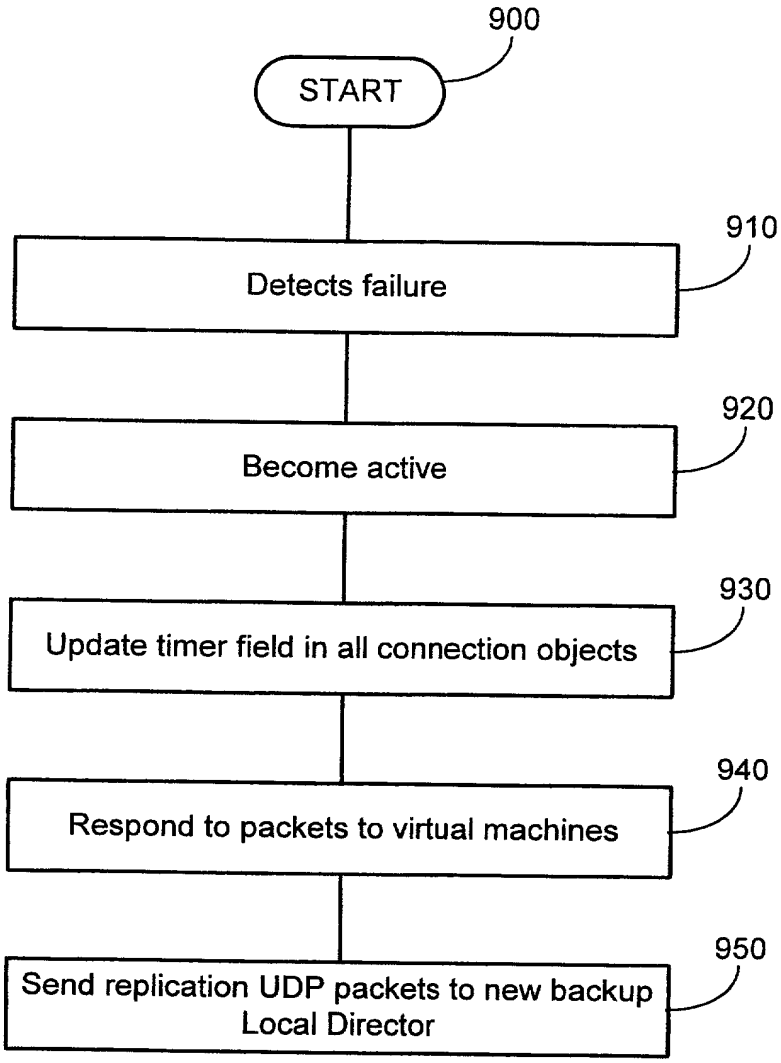
900
START
910
Detects failure
920
Become active
930
Update timer field in all connection objects
940
Respond to packets to virtual machines
950
Send replication UDP packets to new backup Local Director

FIG. 9

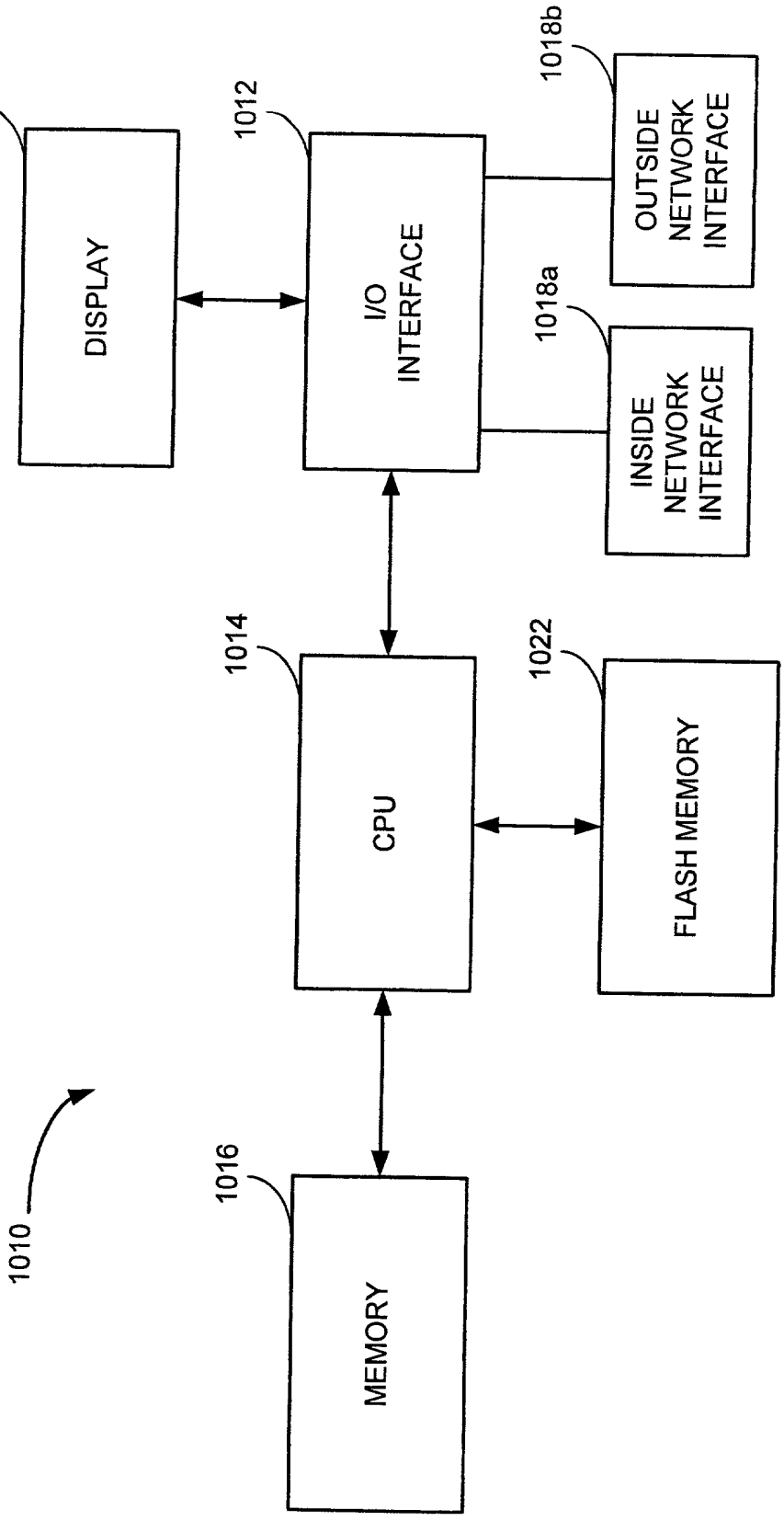
1010
1012
1014
1016
1018a
1018b
1022
1024
DISPLAY
I/O INTERFACE
OUTSIDE NETWORK INTERFACE
INSIDE NETWORK INTERFACE
CPU
FLASH MEMORY
MEMORY

FIG. 10